

## PATHOLOGICAL ANATOMY.

6. *Perforations connecting the Œsophagus with the air tubes of the Lungs.*—Dr. OSBORNE exhibited to the Dublin Association of Physicians two preparations exhibiting the above lesion.

The *first* was taken from a young man who enjoyed good health till about four months previous to his death. At that time he was first observed to cough always after swallowing liquids. This increased so much that he was at length obliged to abstain entirely from drinking. On the morning of his death he was eating a breakfast of beefsteak, when he was seized with a fit of suffocation, and was brought to the hospital gasping for breath. A probang was passed with a view to remove the obstruction, but no improvement was obtained, and in a few minutes he died.

On examination after death nothing was found in the larynx or œsophagus to account for this sudden catastrophe, and the parts were on the point of being closed, when one of the assistants happening to put his finger down the œsophagus, felt something rough at the side of it, adjacent to the bifurcation of the trachea. This produced a further inquiry, and it was ascertained that a perforation had taken place exactly in the raphe above the bifurcation, that a portion of a piece of gristly beef had passed through it, which unfortunately for the patient had been divided into two portions, one of which had stopped up each of the bronchi, while it had been retained in its situation by a large portion connected with it, which remained in the œsophagus. The orifice through which it had passed was a longitudinal slit, which, when expanded, would form an opening equal to a fourpenny piece. There were no vestiges whatever of ulceration, or of any diseased process around the orifice; and Dr. Osborne stated his opinion to be, that this was a case of congenital defect resembling cleft palate; that owing to some accidental circumstance it had become enlarged four months ago, when swallowing fluids was followed by a cough, and the irritation attendant on their escape into the bronchial tubes; that the immediate cause of death was an irritation producing a necessity for coughing, unfortunately at the moment when the piece of beef had arrived opposite the orifice, when the unfortunate patient being obliged to make a sudden and forced inspiration preparatory to the cough, the beef was sucked into the trachea, and each lobe of it also sucked into a bronchial tube, which were thus as it were *corked up*. Perhaps there is not on record a more remarkable instance of loss of life from so singular a combination of circumstances: 1st, A perforation of the œsophagus penetrating the trachea just above the bifurcation; 2dly, The patient making a forced inspiration just at the moment when a piece of meat was in the act of passing the perforation; and 3dly, The meat happening to be divided into three lobes, one stopping up each bronchial tube, while the third remained in the œsophagus, and thus maintained it in its position.

The *second* case was that of an individual who appeared to have possessed intellectual energies far above his station in life. He was a working shoemaker, and burthened with a family, but found time to combine the labours of authorship in various departments, with those of a political orator, and Methodist preacher. About eleven months previous to his death he first experienced a difficulty in swallowing, which gradually became painful. When the patient was admitted into the hospital, he complained of lancinating pains in the œsophagus, even when not engaged in swallowing, which usually belong to the progress of scirrhus and cancerous disease in that part. The passage of the œsophagus tube, however, in the hands of one of the ablest surgeons of Dublin, failed to detect any, even the slightest stricture. Under treatment, the state of his stomach was much improved, but no improvement of deglutition obtained, and he went to the country. His condition did not become sensibly worse till about seven weeks before his death: then he was tormented with cough on every occasion of swallowing, or whenever he lay on the left side, and continued in this state of suffering till his death.

An opportunity of examining the body having been offered by the family, a very remarkable correspondence between the symptoms and the disease was brought to light. The greater part of the œsophagus was so much diseased that in the preparation it can scarcely be recognized. The ulcerations in several places formed large excavations in the mass of adjacent scirrhus structure. In the portion adjacent to the bronchial tube, a peculiarly large excavation extended, engaging in it several of the bronchial glands, and there is an oval perforation with thin jagged edges, forming a direct communication between the œsophagus and the air tube. The size of this being nearly one inch in length and half an inch in breadth, we can readily understand: 1st, How swallowing any thing solid or fluid produced coughing; and 2dly, How some degree of ease was obtained by lying on the right side. It is also to be observed, that although both lungs were healthy, yet that at the apex of the left lung a collection of miliary tubercles were in progress of formation; this being a result of the peculiar irritation to which that lung was exposed, analogous to the case described by Dupuytren, in which there were no tubercles in the body, except round a pin adherent in the lung.

Both those cases illustrate a lesion which has not been described in any work that has come into Dr. O.'s hands, and which must be of great rarity, since no preparation of it is in the museum of the College of Surgeons, or in that of any other collection respecting which he has made inquiries. Perhaps, however, it has not been sufficiently sought for, and the communication of those cases to the association may be useful, if it excites attention to the subject. As perforations between adjacent mucous membranes in other parts are not unfrequent—witness those between the vagina and rectum, the colon and stomach—this occurrence between tubes so closely adherent as the œsophagus and air-tubes may be *à priori* expected to take place, and the above cases showing that it actually does take place, it is to be inferred that the absence of observations of a similar kind has arisen from its having escaped observation, in consequence of pathologists having not sufficiently searched for it.—*Lond. Med. Gaz.* Oct. 1840.

7. *Spontaneous Rupture of the Heart.* This accident is sufficiently rare to render the following examples of it interesting:—

CASE I. *Spontaneous Rupture of Right Auricle—life continued ten hours.* By WILLIAM STROUD, M. D.—F. P., aged 29, after anxiety and vexation endured for a considerable time, and after having been liable to profuse bleeding of the nose, during the spring season, for many years, was, on the non-occurrence of this bleeding, subject for six weeks to a sense of fulness in the head, with lassitude and somnolency. On the morning of April 27, 1839, after having returned from Covent Garden Market, he was seized with faintness, giddiness and vomiting, and insensibility. The pulse became imperceptible, and he was apparently in a dying state. He was promptly bled by Mr. Symes, to three pints, recovered a little, continued complaining of great tightness of the chest, and weight at the heart, but died the same evening.

The pericardium contained a quart of blood which had escaped through an opening in the right auricle just below the insertion of the vena cava superior, the edges of which were not attenuated or apparently ulcerated. The author accordingly suggests the prudence of relieving plethoric oppression, even where signs of structural disease in the sanguiferous system are not evident. In this patient the heart was large and loaded with fat.—*Lond. Med. Gaz.* June 12, 1840.

CASE II. *Rupture of Right Ventricle—life continued eighteen hours.* MR. SMITH exhibited to the Pathological Society of Dublin, the heart of a man, who for two years previous to his death had suffered from repeated attacks of rheumatism. He never complained of any affection of the heart until the night of the 11th November, when he was suddenly seized with symptoms of collapse, and anxiety about the præcordia; his pulse fell to forty in the minute, his extremities became cold, his countenance pale, and his whole body was bedewed with cold perspiration. He remained in this state for eighteen or nineteen hours, and died upon the 12th. Upon examination after death, the pericardium was

found distended with blood, and a small lacerated opening was seen in the apex of the right ventricle, near the septum: the parietes of the ventricle became gradually thinner towards the seat of rupture; in other respects the heart was healthy. From a table drawn up by Dr. Townsend, it appeared that of twenty-five cases of rupture of the heart, in only three was the right ventricle the seat of the rupture; and of nineteen cases collected by Bayle, but three occupied the right ventricle. Mr. Smith remarked that the case he brought forward he considered interesting from its rarity, but it derived an additional interest from the circumstance that the symptoms would lead to the supposition that the rupture had taken place eighteen hours before death: life being prolonged under such circumstances could only, he conceived, be explained upon the supposition, that a coagulum had blocked up the opening in the right ventricle; he supposed that death at length took place when the coagulum was expelled, and concluded by alluding to the cases recorded by Cruveilhier and others, where a firm fibrinous concretion plugged up the fissure.—*Dublin Journ. Med. Sci.*

8. *Encephaloid Disease of the Bones, Liver, and Lymphatic Glands of the Chest and Abdomen.* By Mr. SMITH.—A man, 77 years of age, remarkably large and muscular, and having all the appearance of general good health, was admitted to the hospital on the 17th of January, with the ordinary symptoms of chronic bronchitis, attended with emphysema. He remained without any peculiar alteration till a few days before his death, when he was attacked with pneumonia of the lower lobe of the right lung, which terminated fatally on the 23d.

On dissection the usual phenomena of bronchitis with emphysema were discovered, and in addition to these the right cavity of the pleura contained a large quantity of sero-sanguineous fluid. The lower lobe of the right lung presented an example of pneumonia in its third stage; the rest of that organ was free from inflammation. The surface of the lung at the diseased portion was of a bright fawn colour, produced by a stratum of purulent matter lying immediately under the pleura, and when an incision was made into it a large quantity of purulent matter escaped. Throughout the remainder of the lungs, on the surface as well as in the substance, there were a number of encephaloid tubercles of various sizes. The glands of the posterior mediastinum were in a similar state of degeneration. They formed a considerable tumour, and had elevated the pleura from the spine on the right side, and from the aorta on the left. The aorta adhered so firmly to these glands, that it could not be separated from them without some difficulty; but it did not appear to have suffered any compression, nor did there seem to be any impediment to the flow of blood. On opening the abdomen the liver displayed a fine specimen of the *tubera diffusa* of Farre. The tubercles existed both deep in the substance, and also on the surface of that organ, and in the latter situation presented the usual cup-shaped indentations. The gall-bladder and the biliary ducts were healthy. It was observed that the process of softening generally commenced in the interior of these tubercles, so that when one of them in this state was examined, a cavity was found in the centre resembling that of an abscess. The abdominal glands along the course of the aorta and *vena cava* were similarly diseased, and adhered to the neighbouring vessels. The remaining organs of the abdomen were healthy, excepting the spleen, the capsule of which presented the cartilaginous degeneration. The body slipped off the table during the dissection, and one of the vertebrae fractured. This led to an examination of these bones; and on removing a portion of the spinal column opposite to where the thoracic glands were found so much diseased, a distinct circumscribed tubercle, of a pale rose colour, was met with in the centre of one of the bodies of the vertebrae. The ribs, clavicle, and sternum presented similar morbid degenerations. In some of the bones the encephaloid matter was found deposited in the form of tubercles, in others in a state of infiltration, as it were, through their substance. The aorta from its commencement to its bifurcation was covered in various parts with atheromatous and earthy deposits; and in many places the internal coat of the artery was de-

stroyed.—*Ed. Med. and Surg. Journ.* from the *Dublin Journal of Medical Sciences*, July, 1840.

## MATERIA MEDICA AND PHARMACY.

9. *Preparation and Employment of the Sesqui-Ioduret of Iron.*—M. OBERDOERFFER, a pharmacist of Hamburg, gives the following formula for the preparation of this salt, which he says may be preserved a long time without decomposing:—Mix in a glass vessel half an ounce of iodine, a drachm and a half of iron filing, and an ounce of water; when the reaction is completed, the mixture is to be slightly shaken until it becomes of a clear green colour, due to the ioduret of iron. Then dilute it with four ounces of water, filter and also pass some water through the filter. Afterwards add to the solution two drachms of iodine, which is readily and quickly dissolved. A deep reddish brown liquor results, to which a sufficient quantity of water is added to make the weight of the whole ten ounces. Each drachm contains about four grains and a half of iodine. This preparation has been long employed at the General Hospital, Hamburg; its effects are the same as those of the ioduret of iron; it must be given internally, however, in smaller doses. The best form for its administration is in syrup.—*Zeitschrift für die gesammte Medicin*, June, 1840.

In our Number for February last, (p. 449,) we gave a formula for a syrup of ioduret of iron, which, from considerable experience, we can recommend as a most valuable preparation. It can be preserved for a long time without becoming decomposed, and produces the best effects of the two articles which enter into its composition. The comparative value of this and the sesqui-ioduret must be decided by future experience.

10. *Socotrine Aloes.*—"This plant (the aloe) has rendered Socotra famous from the earliest period. It is found growing on the side and summits of the limestone mountains, at an elevation of from 500 to 3000 feet above the level of the plains. The plant appears to thrive only in parched and barren places; its leaves are plucked at any period, and, after being placed in a skin, the juice is suffered to exude from them. This is afterwards carried principally to Muscat, where the price varies according to the quality, from two to four shillings the English pound. Socotrine aloes, if care were taken in collecting them, would be the finest in the world; but this is not the case, and their value becomes proportionably deteriorated.

"When the authority of the sultans of Kisseen was better acknowledged than at present, they monopolized the whole produce of the island, and stone walls, dividing its surface into separate portions, were carried with immense labour over hill and dale. These still remain, but now any one collects the plant, when or where he thinks proper, and this they only care to do when the arrival of a ship or buggalo creates a demand. Every part of the island affords this useful plant, but more especially the western, where the surface is thickly covered for miles. In 1833, only two tons were exported."—*Wellsted's Tour on the Island of Socotra*.  
T. R. B.

11. *Dragon's Blood.*—"The trees of this are not usually met with at a less elevation than 800 feet, and they frequently occur as high as 3000 feet above the level of the sea. The trunk, at the height of six feet from the ground, varies from twelve to eighteen inches in diameter, and its height is from ten to twenty feet. The gum exudes spontaneously from the tree, and it does not appear usual on any occasion to make incisions in order to procure it. Two kinds were shown me; one of a dark crimson colour, called *moselle*, is esteemed the best, and its price at Muscat is from six to eight rupees, the Bengal seers. I was frequently assured, that not one-tenth of the quantity which might be pro-